What is claimed is:

1. A route control device which can be disposed between a plurality of first devices and a second device for providing a service to said first devices, comprising:

5       a plurality of I/O modules, to which said first devices can be connected, inputting and outputting data to said first devices thereto;

a service storage module storing a service that should be provided from said second device to said first

10    devices connecting to said I/O module in a way that maps the service to each said I/O module;

a service determining module searching through said service storage module and thus determining the service that should be provided to said first devices connecting

15    to any one of said I/O modules; and

a service request module requesting said second device to provide the service determined by said service determining module to said first devices concerned.

20    2. A route control device according to claim 1, further comprising a setting module setting a content stored on said service storage module in accordance with an input from said first devices.

25    3. A route control device according to claim 2, wherein said setting module provides said first devices with a user interface for setting a content stored on said

service storage module, and sets the content stored on said service storage module on the basis of data inputted via said user interface.

4. A route control device according to any one of claims 1 through 3, further comprising a link detection module detecting said I/O module with an established link to said first devices among said plurality of I/O modules,

wherein said service determining module determines the service that should be provided to said first devices connecting to said I/O module detected by said link detection module, and

said service determining module and said service request module operate when said link detection module detects the establishment of the link.

5. A route control device according to claim 4, wherein said link detection module further detects said I/O module of which the link established so far is disconnected,

said service determining module determines the service provided to said first devices connecting to said I/O module, and

said service request module requests said second device to stop providing the service to said first devices.

6. A route control device according to claim 4 or

5, further comprising a data detection module detecting said I/O module, to which the data is inputted from said first devices, among said plurality of I/O modules,

wherein said service determining module determines

5   the service that should be provided to said first devices connecting to said I/O module detected by said data detection module, and

said service determining module and said service request module operate when said data detection module

10   detects the input of the data.


7. A route control device according to claim 6, wherein said data detection module further detects said I/O module to which the data is not inputted for a fixed

15   period of time,

said service determining module determines the service provided to said first devices connecting to said I/O module, and

said service request module requests said second

20   device to stop providing the service to said first devices.


8. A route control device according to claim 6 or 7, wherein said service storage module further stores, for each of said I/O modules, information indicating which

25   module, said link detection module or said data detection module, controls the operations of said service determining module and of said service request module with

respect to said I/O module.

9. A route control device according to any one of claims 1 through 8, wherein said service storage module, if there is added information required with an execution of the service, further stores the added information in a way that maps the added information to the service.

10. A route control device according to claim 9, wherein the service includes providing a VPN (Virtual Private Network), and

said service storage module, when storing the virtual private network as a service, stores as the added information a user identifier and a password that are required for said first devices connecting to said I/O module mapping to this server to be connecting to said virtual private network.

11. A route control device according to any one of claims 1 through 10, wherein the service includes a best-effort service and a fixed bandwidth assurance service as QoS (Quality of Service).

12. A route control device according to any one of claims 1 through 11, further comprising a download module downloading a program for controlling an operation of a self-device from said second device.

13. A route control system comprising:

a plurality of first devices, a second device for providing a service to said first devices and a third device disposed between said first devices and said second device,

said third device including:

a plurality of I/O modules, to which said first devices are connected, inputting and outputting data to said first devices connected thereto;

a first service storage module storing a service that should be provided from said second device to said first devices connecting to said inputting/outputting module in a way that maps the service to each said I/O module;

a service determining module searching through said first service storage module and thus determining the service that should be provided to said first devices connecting to any one of said I/O modules; and

a service request module requesting said second device to provide the service determined by said service determining module to said first devices concerned,

said second device including:

a second service storage module storing the service requested by said third device in a way that maps the service to said first devices; and

a service execution module determining a relevant service for said first devices by searching through said

second service storage module and thus determining the service.

14. A route control system according to claim 13, wherein said second device further includes an authentication module authenticating said third device or a user of said third device on the basis of data received from said third device in cooperation with an authentication server, and

said service execution module executes the service about only said third device permitted as a result of the authentication.

15. A route control system according to claim 13 or 14, wherein said service request module requests batchwise said second device to provide a plurality of services respectively to said first devices concerned.

16. A route control system according to claim 14, wherein said second device further includes an accounting module charging the user of said first devices a fee for the service executed by said service execution module on the basis of a content of this service.

17. A route control system according to claim 13, wherein said second device and said third device are so connected as to be communicable via a communication line

based on one point-to-point protocol, and

said service request module makes a request for the

service different for every session of Transmission

Control Protocol.

5